of the athetotic side measured 16 cm. to 15 cm. on the sound side. Mensuration was confirmed by the radiographic test. Not only the bones of the carpus but the lower ends of the radius and ulna were distinctly enlarged. The patient had ordinary infantile cerebral hemiplegia of the face and limbs, followed by athetoso-chorea. The affection was due to hard labor and obstetrical intervention.

The authors' conclusions are: This phenomenon may possibly be due to the athetotic movements. But why then does it not always occur along with the muscular hypertrophy? Excessive use, besides, does not explain the hypertrophy of the breast in one of the cases, nor the enlargement of the testicle of the paralytic side in a case of Bourneville's. The cause must be trophic. CLARK.

ZWEI BEMERKENSWERTHE FÄLLE VON ERKRANKUNG DER NERVEN AUS DEM PLEXUS SACROLUMBALIS (Two unusual Cases of Disease of the Sacrolumbar Plexus). F. Hartman (Jahrbücher für Psychiatrie und Neurologie, 19th Vol., 1900, p. 471).

Case I. An injury to the nerve plexus of the lower extremity by means of a stab wound through the ischiaticuu majus without other serious injury to the pelvic organs. There resulted from this a total paralysis of the left leg, with corresponding loss of sensation. The total paralysis indicated a lesion of the ischiatic, crural, and obturator nerves. In studies upon the cadaver it is apparent that the lesion must have been in the region where the roots of the ischiatic come together, that is in the sacral plexus in the region where the fibers which go to make up the ischiatic are situated. The third and fourth sacral roots escaped. The obturator in its course through the pelvis and the crural, to the linea innominata, are injured, and by the same mechanical lesion the muscle iliopsoas, the glutei and pyriform. Diagnosis: Neuritis of the ischiatic, obturator and crural nerves.

Case II. A man 50 years old, noticed for the past year a small spot on the thigh which felt dead, no pain. Shortly after this continuous pain in this region was felt, as also in the small of the back, on slight exertion. Decrease in size of the left upper leg. Cremaster reflex right lively, left absent. Gluteal reflex present. Patellar reflex right slightly increased, left absent. The extensors of the knee joint are paretic. Flexion of the hip joint weaker than normal. Abduction of the leg normal. Adduction weak. Rotation not changed. Electrical examination shows moderate R. D. In this case there is a group of symptoms which results from some injury of the territory supplied by the crural, obturator and external spermatic nerves. The seat of the disease is taken to be in the lower plexus, the first four roots being involved. Iliopsoas, sartorius, and abdominal muscles (I and II), quadriceps, adductors, pronators (III and IV), cremaster reflex (I-III), plantar reflex (II-IV), skin over pubes, anterior aspect of scrotum (II-IV), external side of the hip (II), anterior and inner side of the hip (III), inside of foot (IV). A condition of degenerative neuritis was present in this case, the possible etiological factors being diabetes and alcohol, though the strictly unilateral distribution of the process would not favor either of these assumptions.
SCHWAB.

KLINISCHE UND PATHOLOGISCH-ANATOMISCHE UNTERSUCHUNGEN ÜBER DIE UNCOMPLICIRTEN, TRAUMATISCHEN RÜCKENMARKSERKRANKUNGEN (Clinical and Anatomico-pathological Investigations on

Uncomplicated, Traumatic Spinal Cord Affections). F. Hartman (Jahrbücher für Psychiatrie und Neurologie, Vol. 19, 1900, p. 380).

A very careful study of this most complicated question, in an abstract only a few of the more important points can be brought out. The author bases his study upon the theory that every force which acts upon the bony framework of the central nervous system must be followed by changes in the inclosed structures. In the spinal cord, as in the brain, the symptoms following trauma must be divided into the curable and the incurable, and the pathological conditions into temporary and permanent anatomical changes. The rapid appearance and disappearance of symptoms is regarded by Kocher as typical of commotio cerebri. This is also the case in spinal cord trauma, but a pure commotio spinalis is much more difficult to find than a commotio cerebri. This difference is easily appreciated when the elastic completely inclosing skullcap and the segmentary structure of the spinal cord with its many bony openings are compared. In the latter a trauma can act to much better advantage.

Case I. A typical example of the much-discussed term commotio spinalis following a fall on the neck after which, without any severe signs of commotio cerebri, symptoms appeared which could only be interpreted as depending upon disturbances of the functions of the medulla and cord, the areas of distribution of these symptoms depending upon the spinal nerves arising from it. The following cases are discussed as being those of uncomplicated, direct traumatic diseases of the cord. Case I. Contusion of the spinal column, spondylitis traumatica, mild transverse disease of the mid-dorsal region of the cord. Case II. Contusion of the spinal column, spondylitis traumatica, transverse lesion of the fifth lumbar segment, with possible Brown-Sequard symptoms. Case III. Fall upon the buttocks, contusion of the spinal column, unilateral lesion of the tenth dorsal segment. Case IV. Contusion of the spinal column, partial lesion of the fifth cervical segment, with small disseminated foci in the lower cervical cord (indirect cord lesion). Case V. Contusion of the spinal column, central disease, especially of the motor territory of the eighth cervical and first dorsal segments (indirect cord lesion). Case VI. Contusion of the spinal column, partial lesion of the sixth and seventh cervical segments and their roots, severe root disease of the lumbar cord (disseminated diseased foci in the medulla spinalis without primary or secondary hemorrhages. Case VII. Contusion of the spinal column, central disease of the cord in upper portion of the spinal column, severe transverse lesion in region of the fifth cervical segment. These cases are all carefully described and the post-mortem examinations, both macro- and microscopical are carefully noted. The following are some of the clinical and pathological conclusions. We divide traumatic diseases of the cord into complicated (direct, accompanied by spinal column disease), and uncomplicated. The uncomplicated variety is divided into direct traumatic, in which the disease of the cord follows the trauma immediately, and into indirect traumatic, in which the trauma forms the starting point for the development of a chronic cord disease later. In this group the author includes poliomyelitis anterior chronica (Erb), sclerosis, gliosis, sclerogliosis, and syringomyelia of traumatic origin. In respect to the mechanics of the spinal cord injury we distinguish a direct and an indirect form. The latter depends upon the influence of the peculiar structure of the spinal column, and we believe that we have found in this fact a reason for the greater frequency of traumatic diseases of the cervical cord than elsewhere. According to our opinion, we are not in a position to determine from the clinical picture of a spinal cord trauma the definite pathological process which underlies it. The primary degeneration is divided into a lymphogenous and an ischemic form. The pathological changes in the meninges are divided into hemorrhages, scar-tissue formation, shrinking and adhesive meningitis. The lymphatic apparatus into lymph infiltration, degeneration, cavity formation; vascular system into a primary and secondary hemorrhage, hyperemia, endothelial growth, change of the adventitia into embryonic tissue with regenerative function, pure periarteritis and arteritis; Glia tissue into moderate proliferation; Nervous tissue into primary mechanical destruction, lymphogenous and ischemic degeneration (primary necrosis). Root diseases and cell changes are often found at a distance from the location of the lesion. SCHWAB.

REPERTO ANATOMO-PATOLOGICO DI UN CASO DI EPILESSIA CON MIOCLONIA (Report of Autopsy of a Case of Epilepsy with Myoclonus). Rossi and Gonzales (Annali di Nevrologia, Vol. xviii, No. iv).

The authors refer to the three cases reported in this journal in 1899 by Verga and Gonzales, in which epilepsy and myoclonus were associated. The first case reported by these authors having died, the present writers secured the opportunity for an autopsy including histological studies. (But one or two pathological studies are on record.) The history of the patient is briefly recapitulated as follows: Carlo B., single, entered Milan Provincial Insane Asylum in 1894 when 32 years of age, for epileptic insanity, for which he had been treated on several prior occasions at the Ospedale Maggiori. The epilepsy began when the patient was seven years old. His family history was very bad; his father demented, mother eclamptic, one brother and two sisters epileptic. Toward the age of 20, patient had added to his epilepsy the phenomena of myoclonus, which became more and more frequent, and was accompanied at times by violent maniacal agitation. Upon admission, patient was seen to have notable facial asymmetry, but no other anomalies. His epileptic attacks did not exceed one a month. The phenomena of myoclonus were seen to be present in the limbs and face, especially the frontal muscles, the head being moved backward and sidewise, the shoulders suddenly elevated and depressed, the arms and legs elevated and abducted. The patient had to keep his bed on account of the danger of falling, and was unable to feed himself properly. His mental condition became worse, and from a mild disposition he developed in the last few months of life an irascibility and impetuosity, with hallucinations. The myoclonus became worse and worse, nutrition failed, finally pleurisy developed with a high degree of effusion, the patient dying in March, 1900. An autopsy was held March 27, 1900, the day after death. Dr. Verga was responsible for the macroscopic and Dr. Gonzales for the microscopic findings. External appearances: emaciated; rigor mortis only in the right lower extremity; slate colored macules on trunk (inferior external aspect of thorax). Head irregular in shape. Thorax right pleural sac filled with bloody serum. Lung on that side compressed. The left lung showed